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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,983	09/19/2001	Marco Winter	PD990019	2973

7590 05/01/2007

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EXAMINER	
VENT, JAMIE J	

ART UNIT	PAPER NUMBER
2621	

MAIL DATE	DELIVERY MODE
05/01/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/936,983	WINTER ET AL.	
	Examiner	Art Unit	
	Jamie Vent	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 April 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *13-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *13-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 9, 2007 has been entered.

Response to Arguments

Applicant's arguments with respect to claim 13 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 13-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikuchi et al (US 5,870,523) in view of Willis (US 6,154,603) in further view of Ando et al (EP 1 021 048).

[claims 13 & 23]

In regard to Claims 13 and 23, Kikuchi et al discloses a method for recording a bitstream on a bitstream recorder such that the recorded bitstream can be replayed in a trick play mode, the method comprising:

- recording said bitstream in predetermined-size stream object units, said recorded bitstream having data contained in application packets that are contained in said stream object units (Figure 26 shows a predetermined area, 2025 bytes or less, that the information is recorded into the bitstream);
- recording an access unit start map for said access unit information, wherein in said access unit start map a respective flag is assigned to each one of said stream object units, each of said flags indicating with a first value that the start of one of said access units is contained within a range of said recorded bitstream consisting of a corresponding stream object unit and the Immediately subsequent stream object unit, or indicating with a second value that no corresponding access unit exists for that flag and its related stream object unit (Figure 6 element 86 shows a navigation map and Figure 35a shows the mapping information.) ;
- access unit information is associated with said bitstream and with related navigation data to be recorded (Figure 6 shows the navigation information that relates to the recorded data); however, fails to disclose the access units as parts of said recorded bitstream that are accessible for said trick play mode and recording an access unit start map for said access unit

information, wherein in said access unit start map a respective ~ flag is assigned to each one of said stream object units, each of said flags Indicating with a first value that the start of one of said access units is contained within a range of said recorded bit stream consisting Of a corresponding stream object unit and the immediately subsequent stream object unit, or indicating with a second value that no corresponding access unit exists for that flag and its related stream object unit.

Willis et al discloses a system for decoding pictures for trick play operations as seen in Figure 1b. The access unit allows the recorded bitstream to be accessible for trick play as described in Column 4 Lines 55+ through Column 5 Lines 1-12. The ability for the bit stream to contain a trick play operation allows for accessing of the data at various points through the bitstream. It is further taught by Ando et al the ability to record an access unit start map that contains a flag that is assigned to the bit streams as described on Page 7 Lines 40+ through Page 9 Line 20. The marking of the stream object on the access unit map allows for proper and efficient detection of the bit stream for processing.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the recorded bitstream as disclosed by Kikuchi et al and further incorporate a system that allows for trick play operations, as disclosed by Willis et al, and further incorporate the flag to mark the stream object units in the access unit start map, as described by Ando et al.

[claim 14]

In regard to Claim 14, Kikuchi et al discloses a method wherein said access unit information includes an access unit start location list having a number of entries that matches the number of flags in said access unit start map having said first value, and wherein each successive flag of said access unit start map having said first value is associated with a corresponding location information in said access unit start location list, which in turn identifies the location of a first application packet of the corresponding access unit within the corresponding stream object units (Figure 32 shows the access map wherein the entry of the end point is illustrated in VOBU end address).

[claim 15]

In regard to Claim 15, Kikuchi et al discloses a method further comprising the step of: recording an access unit end map for said access unit Information, wherein said access unit end map comprises a bit array of a same length as said access unit start map. and wherein in said access unit end map a respective flag is assigned to each of said stream object units, said flag indicating with a first value that the associated stream object unit contains the end of one of said access units, the beginning of which has been indicated by a flag within said access unit start map (Column 23 Lines 48+ describes the start and end marks that indicate the start and end of an access unit).

[claims 16, 24, & 25]

In regard to Claims 16, 24, and 25, Kikuchi et al discloses a method further comprising wherein said access unit information Includes an access unit end location list having a number of entries that matches the number of flags in said access unit end map having said first value and wherein each successive flag in said access unit end map having

said first value is associated with a corresponding location information in said access unit end location list, which in turn describes the location of the last application packet of the corresponding access unit within the corresponding stream object units (Figure 34 shows the bitstream that determines the cell# associated with the playback of the data).

[claims 17, 18, 26, & 27]

In regard to Claims 17, 18, 26, and 27, Kikuchi discloses a method of claim 15, wherein the index of each access unit end entry having said first value is equal to or greater than the entry Index of its corresponding access unit start map entry having said first value, and is less than the index of the immediately following access unit start map entry having said first value if any following access unit start map entry exists (Figure 35a shows the VOBU start address of the bitstream wherein the start map provides the starting address for the bitstream).

[claim 19]

In regard to Claim 19, Kikuchi discloses a method of claim 13, wherein said trick play mode includes at least we of a fast forward, fast reverse, slow motion, singre picture step ancl still picture trick play modes (Column 1 Lines 40-44 describes the fast forward, reverse, and still picture trick play).

[claim 20]

In regard to Claim 20, Kikuchi discloses a method of claim 13, wherein the recorded bitstream contains access unit start and access unit end marks which indicate the start or the end of access unit, respectively (Column 23 Lines 48+ describes the start and end marks that indicate the start and end of an access unit).

[claim 21]

In regard to Claim 21, Kikuchi discloses a method of claim 13, wherein said access unit start map is byte and wherein, if the concatenated access unit start map entries consist of a number of bits which is not an integer multiple of eight, then the remaining least significant bits of the last byte of the access unit start map are filled with a corresponding number of padding bits (Figure 35a shows start entry map wherein the integer is not a multiple of 8 (i.e. 14, 12, 12 etc)).

[claims 22 & 28]

In regard to Claims 22 and 28, Kikuchi discloses a method for replaying bit streams; however fails to discloses in a trick play mode a bitstream that was recorded on a bitstream recorder according to the method of claim 13, said method comprising replaying in said trick mode the parts of the recorded bitstream which are related to the access units that are selected by evaluating the flags in said access unit start map. Willis et al discloses a system for decoding pictures for trick play operations as seen in Figure 1b. The access unit allows the recorded bitstream to be accessible for trick play as described in Column 4 Lines 55+ through Column 5 Lines 1-12. The ability for the bit stream to contain a trick play operation allows for accessing of the data at various points through the bitstream. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the recorded bitstream as disclosed by Kikuchi et al and further incorporate a system that allows for trick play operations, as disclosed by Willis et al.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Auld (US 5,835.636)

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamie Vent whose telephone number is 571-272-7384. The examiner can normally be reached on 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim Groody can be reached on 571-272-7950. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JOHN MILLER
SUPERVISORY PATENT EXAMINER
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